

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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10/620.654

: Confirmation No.:

1421

Applicant

Rabasco, et al

Filed

July 16, 2003

For

Polymer Emulsion Coatings For Cellulosic Substrates

With Improved Barrier Properties

Art Unit

1773

Examiner

Tarazano, Donald Lawrence.

Docket No.

06326 USA

Customer No.

23543

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 CERTIFICATE OF MAILING

I CERTIFY THAT THIS PAPER (ALONG WITH ANY PAPER REFERRED TO AS BEING ATTACHED OR ENCLOSED) IS BEING DEPOSITED WITH THE POSTAL SERVICE WITH UNITED STATES SUFFICIENT POSTAGE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO:

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Date

Mary E. Bongiorno

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Sir:

DECLARATION UNDER 37 CFR 1.132

Dr. Christian L. Daniels, the declarant hereby states the following:

- 1. that he has a Masters Degree in the field of Polymer Science;
- 2. that he is employed by the assignee in the above application, i.e., Air Products Polymers, L.P. as a research chemist;
- 3. that his field of endeavor within the Product Research Group of Air Products Polymers, L.P. resides, inter alia, in the development of polymer emulsions for use as pressure sensitive adhesives, laminating adhesives, nonwoven binders, coatings, caulks, grouts, etc.;

- that as Research Associate he has considerable experience in the design and development of vinyl acetate based emulsions, including vinyl acetate/ethylene emulsions, for the above recited applications;
- 5. that he is familiar with the subject matter described in the above-identified application and has actual knowledge of the physical properties of the vinyl acetate/ethylene polymers described in the above-identified application used as barrier coatings for cellulose and paper substrates;
- that he has reviewed the Office Action of October 31, 2005 and May 2, 2006 including more specifically the rejection of Claims 1-18 either in part or in combination based upon the Daniels, et al US 5,872,181 and Daniels, et al US 6,319,978;
- 7. that he understands from a reading of the Office Action, and the response to be filed, that the Examiner has taken the position that there was clear reason to believe the polymers described in the two Daniels, et al references which have a storage modulus of at least 1 X 10⁵ would have thermal melting points of from 35 to 110 °C and heats of fusion and within the range claimed in the above-identified application;
- 8. that he also understands that there was perceived ambiguity in his prior declaration in that the Examiner did not interpret the declaration to include the working examples having a storage modulus of at least 1 X 10⁵ and to the commercial examples having a storage modulus of at least 1 X 10⁵ when indicating that those polymers did not have ethylene crystallinity having a melting point of from 35 to 110 °C;
- 9. that as a coinventor in the Daniels, et al '181 reference and the '978 reference, he now states that with regard to all polymers described in the Daniels, et al '181 and '978 references, none of the vinyl acetate/ethylene polymers described in the working examples and none of the vinyl acetate/ethylene polymers described in the comparative examples, including the commercial vinyl acetate/ethylene polymers described in '181

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and '978 patents, were observed to have ethylene crystallinity having a melting point of

from 35 to 110 °C; and,

10. that as stated in the February 14, 2006 declaration the thermal properties of all vinyl

acetate/ethylene polymers in Daniels, et al '181 and '978 are substantially different from

those in the above captioned application having a storage modulus of at least 1 X 105 at

a temperature of 115 °C and ethylene crystallinity having a thermal melting point of from

35 to 110 °C even though some of the polymers in Daniels, et al '181 and '978 may have

a tensile storage modulus within the range claimed.

That all statements made herein of his own knowledge are true and that all statements

made on information and belief are believed to be true and further that these statements are

made with knowledge that willful false statements and the like so made are punishable by fine

or imprisonment, or both, under Section 1001 of title 18 of the United States Code and that such

willful false statements may jeopardize the validity of the application or any patent issuing

thereon.

Christian L. Daniels

Title: Research Asca

Date 31 July 200C

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